UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

October 1961

Part II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

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* Part I - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, Post Office Building, San Pedro, California

A DEVICE FOR RECORDING NET DEPTH

An instrument which graphically records depth as a function of time has been developed by the U.S. Bureau of Commercial Fisheries Biological Laboratory, San Diego. The device was designed for use on tuna purse seines. However, it should be readily adaptable for gill nets and other applications where instantaneous telemetered depth information is not required.

The pressure sensing device is an "O" ring sealed, spring loaded, piston available in various diameters depending upon the maximum anticipated depth. The recording paper is attached to a drum which is rotated by a clock. The device is made of aluminum, is less than 21 inches long and of near neutral buoyancy. It is rugged enough to survive riding the lead line of a purse seine while the net is being set. The clock starts automatically upon submersion.

SUSPENSION OF 15-DAY SUPPLEMENTS UNTIL APRIL 1962

The April 1961 issue of this publication indicated that issuance of the 15-day sea surface temperature chart (supplements I and II), which covers the region of the albacore fishery, would be suspended at the close of the albacore season. The October 15-31, 1961 chart is the last of the 15-day series to be published this year. Issuance of the 15-day chart will be resumed in April 1962.

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN OCTOBER 1961

Acknowledgments

The following organizations and stations contributed data for the October 1961 charts:

U.S. Weather Bureau, San Diego, California
U.S. Weather Bureau Ship Visitation Office, Long Beach, California
U.S. Naval Communication Station Balboa, Fort Amador, Canal Zone
U.S. Navy Branch Hydrographic Office, Honolulu, Hawaii; Seattle, Washington; San Francisco and Wilmington, California
U.S. Coast Guard, Port Hueneme Light Station, Port Hueneme, California
U.S. Bureau of Commercial Fisheries, Biological Laboratories, Honolulu, Hawaii; La Jolla, California; Seattle, Washington
U.S. Bureau of Commercial Fisheries, Exploratory Fish and Gear Research Base, Seattle, Washington
Hopkins Marine Station, Pacific Grove, California, by J. P. Balesteri
Humboldt State College by George Allen
Inter-American Geodetic Survey by Rene Cortes at Salina Cruz, Mexico; David Ortega at Manzanillo, Mexico; Romeo Valencia at Pt. San Jose, Guatemala; R. E. Pino at Pt. Armuelles, Panama; V. E. Castillo at Tumaco, Colombia; Gualberto Tapia at San Cristobal, Galapagos; Rodrigo Gomez at La Libertad, Ecuador; G. Villar at Talara, Peru; R. Celis at San Juan, Peru
Inter-American Tropical Tuna Commission, La Jolla and Terminal Island, California; Piura, Peru

Kelco Company, San Diego, California
Pacific Oceanographic Group, Nanaimo, British Columbia, by H. J. Hollister from observations by R. W. Collins at Quatsino Lightstation; J. M. Allen at Cape St. James Light; B. Stuart at Amphitrite Point Light; J. M. Hartt at Langara Island Light
Scripps Institution of Oceanography, La Jolla, California by Margaret Robinson and Hans Klein
Ships Frances Salman, Trolleggen, Elin Haven, Besseggen, Kongsholm, Santa Maria and Azoreana

Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 8000 observations. Squares show temperatures at weather-ship stations. Numerals on shore are temperatures at coastal and light stations.

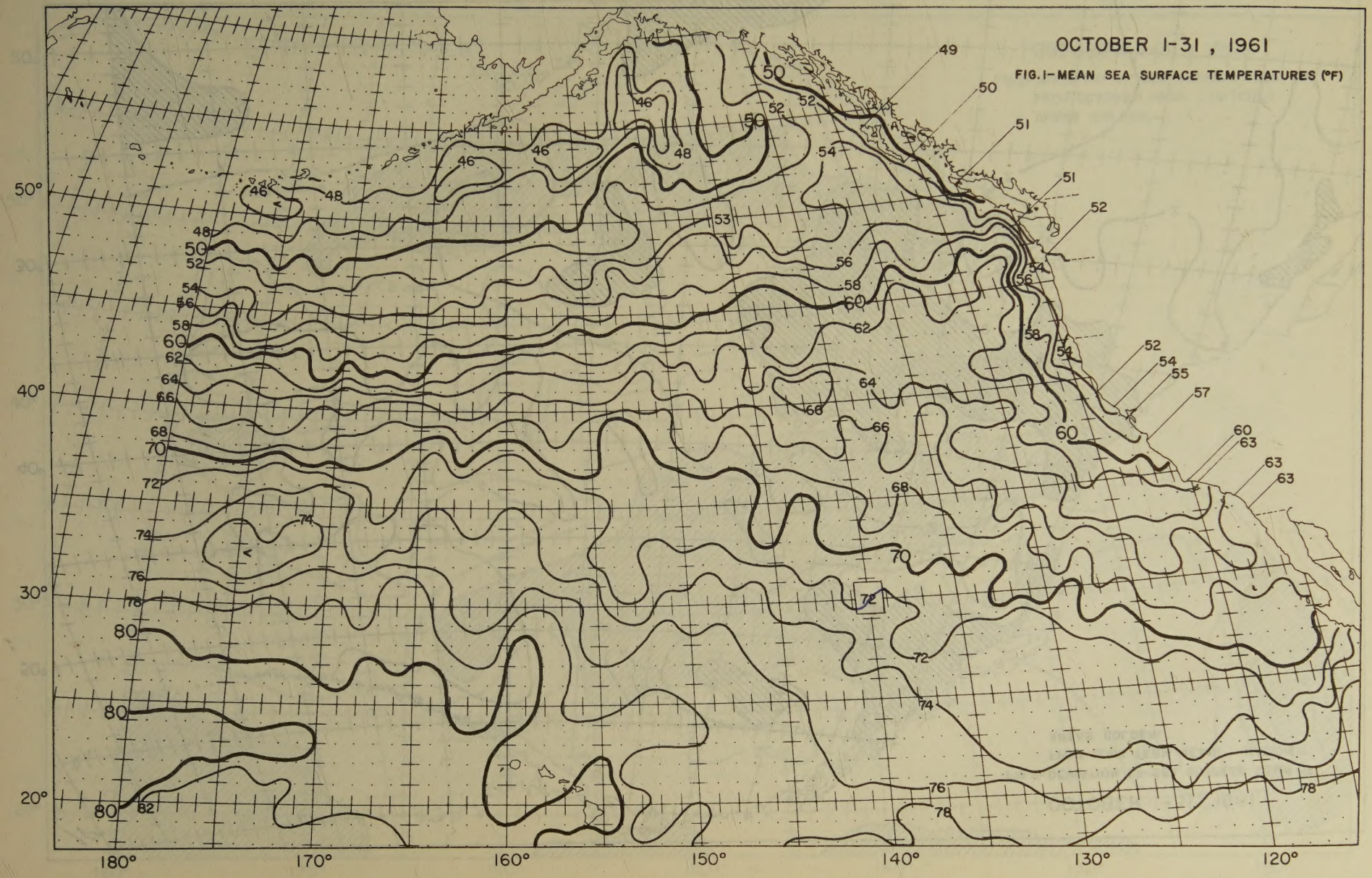
Figure 2.--Deviation of sea surface temperatures (°F) from long term mean charts of H.O. 225. Hatched areas are colder than mean.

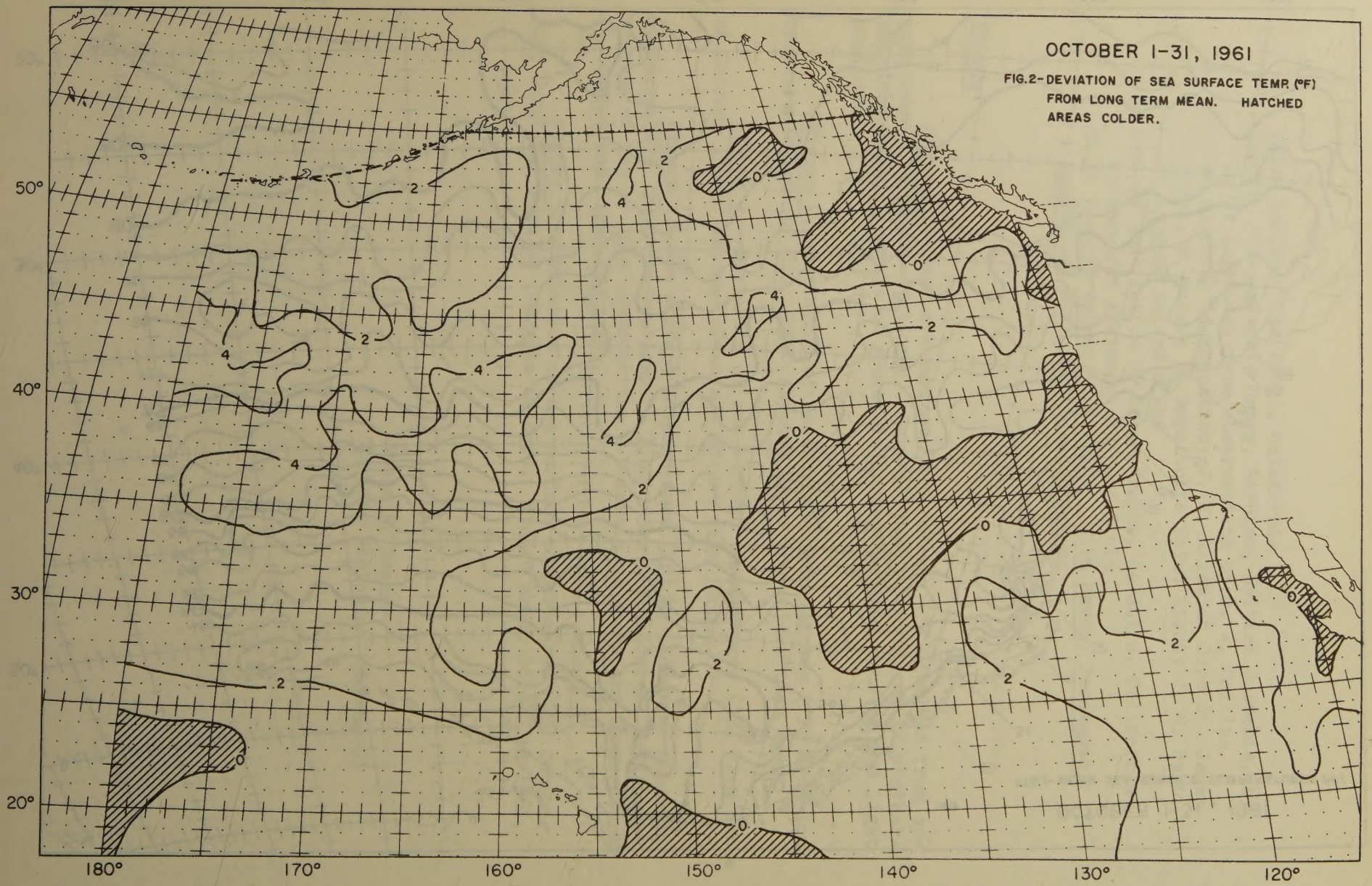
Figure 3.--Deviation of sea surface temperatures (°F) from those of October 1960. Hatched areas are colder than 1960.

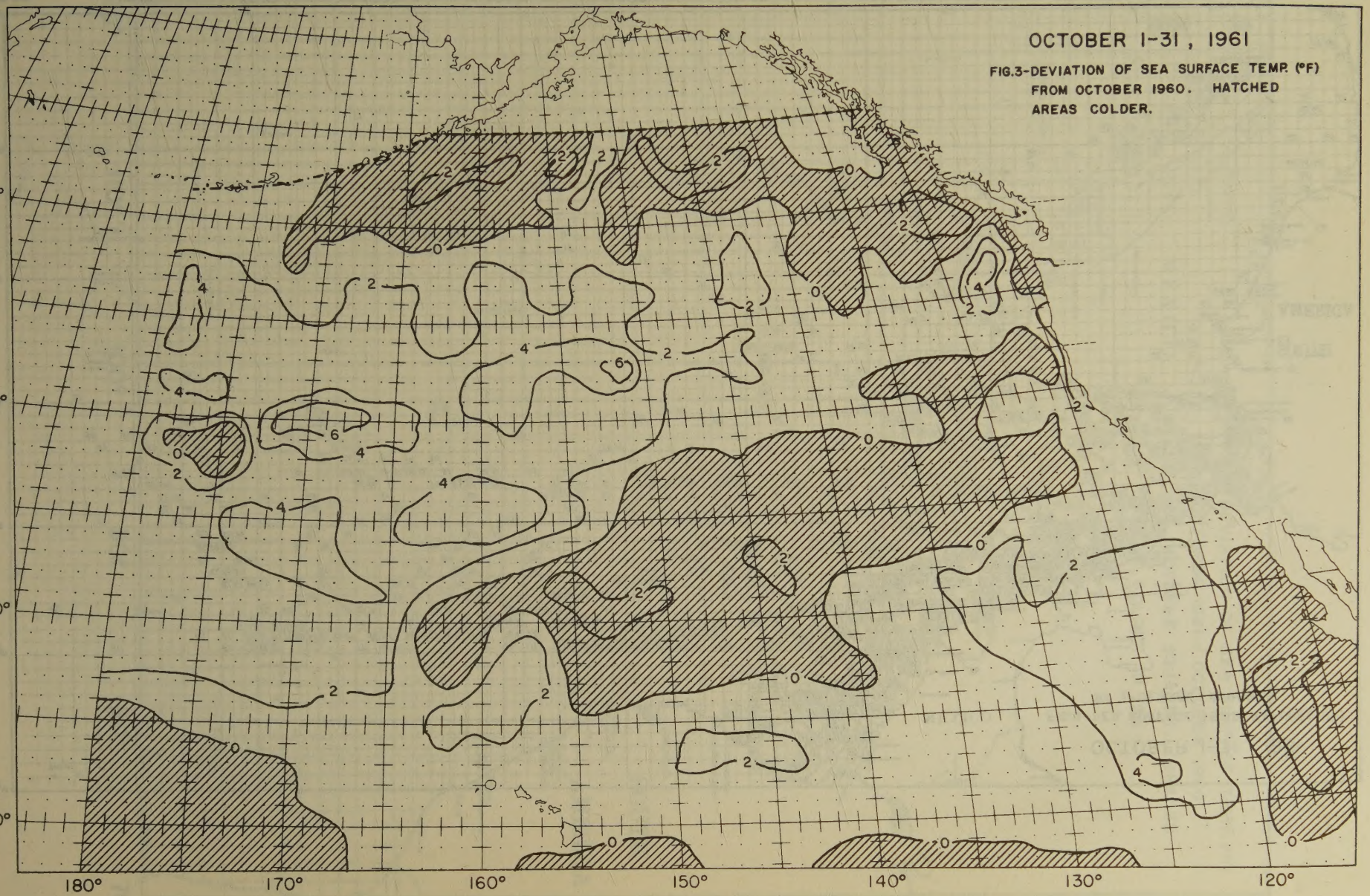
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal and light stations.

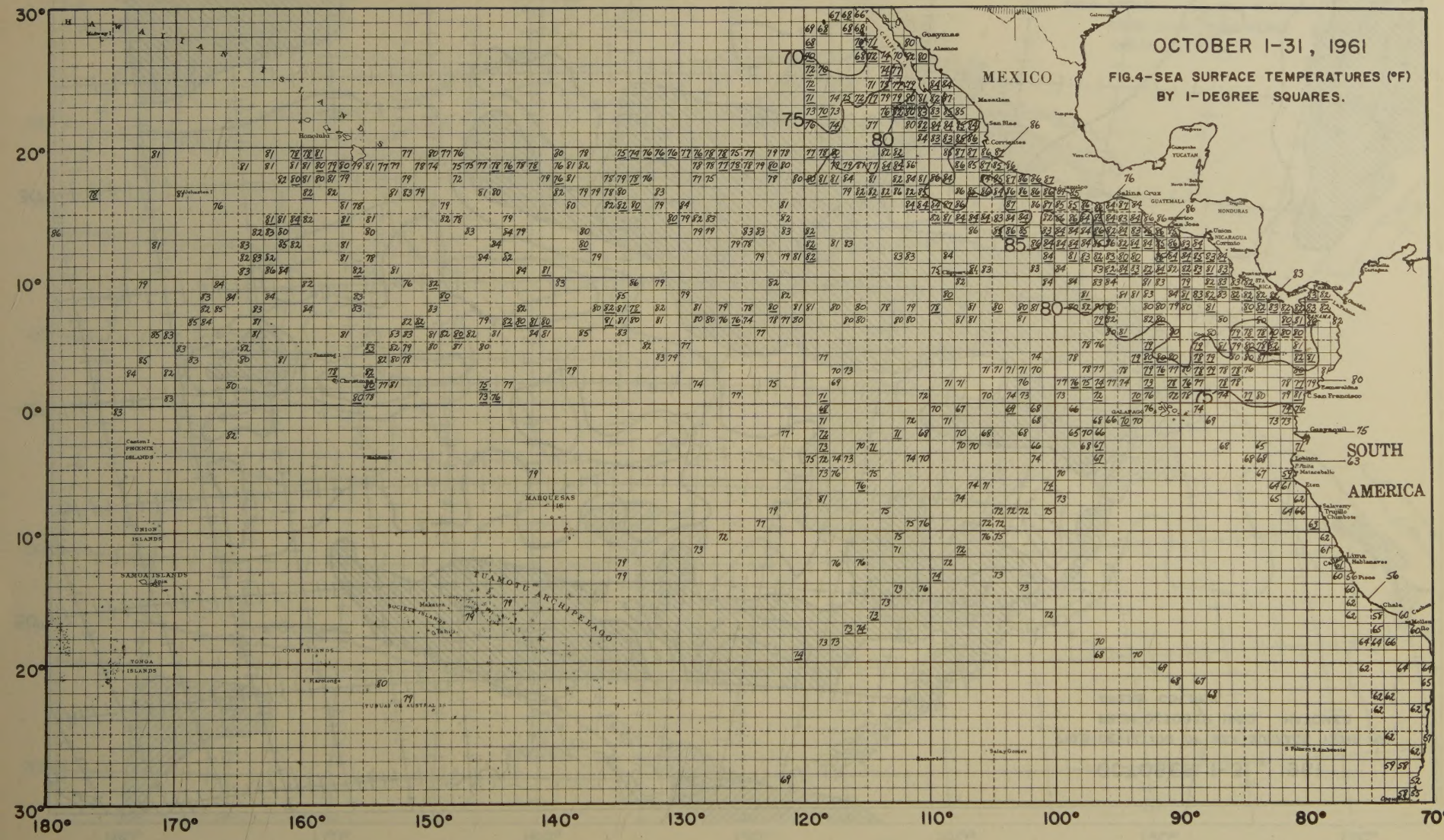
Figure 5.--Deviation of sea surface temperatures (°F) October 1961 - October 1960 by 1-degree squares. Shaded areas colder in 1961.

James A. Renner
Fishery Biologist (Research)


OCTOBER 1-31, 1961
FIG. I-MEAN SEA SURFACE TEMPERATURES (°F)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


OCTOBER 1-31, 1961
FIG.2-DEVIATION OF SEA SURFACE TEMP.(°F) FROM LONG TERM MEAN. HATCHED AREAS COLDER.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


OCTOBER 1-31, 1961
FIG.3-DEVIATION OF SEA SURFACE TEMP. (°F) FROM OCTOBER 1960. HATCHED AREAS COLDER.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


OCTOBER 1-31, 1961
FIG.4-SEA SURFACE TEMPERATURES (°F)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
HAWAIIAN
ISLANDS
Honolulu
Midway I.
Johnston I.
Canton I.
PHOENIX
ISLANDS
Palmyra
MARQUESAS
UNION
ISLANDS
SAMOA ISLANDS
TUAMOTU ARCHIPELAGO
SOCIETY ISLANDS
Tahiti
COOK ISLANDS
TONGA
ISLANDS
Penrhyn
Rarotonga
TUBUAI OR AUSTRAL IS.
Manzanillo
Acapulco
Salina Cruz
Puerto Angel
Tehuantepec
GUATEMALA
HONDURAS
NICARAGUA
Corinto
Guayaquil
Salaverry
Trujillo
Chimbote
Lima
Callao
Pisco
Chala
Mollendo
Arica
Iquique
Antofagasta
Valparaiso
Coquimbo
Caldera
Huasco
Easter I.
Salas y Gomez
Juan Fernandez
S. Felix
S. Ambrosio
Galapagos
Cocos I.
Malpelo I.
Buenaventura
Tumaco
Esmeraldas
S. Francisco
Cristobal
Colon
Panama
Puntarenas
Corinto
Manzanillo
Acapulco
Salina Cruz
Puerto Angel
Tehuantepec
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Tampico
Veracruz
Coatzacoalcos
YUCATAN
Progreso
Belize
Roatan
Omoa
Puerto Cortes
Trujillo
Cristobal
Colon
Panama
Puntarenas
Corinto
Union
Corinto
Puntarenas
Esmeraldas
S. Francisco

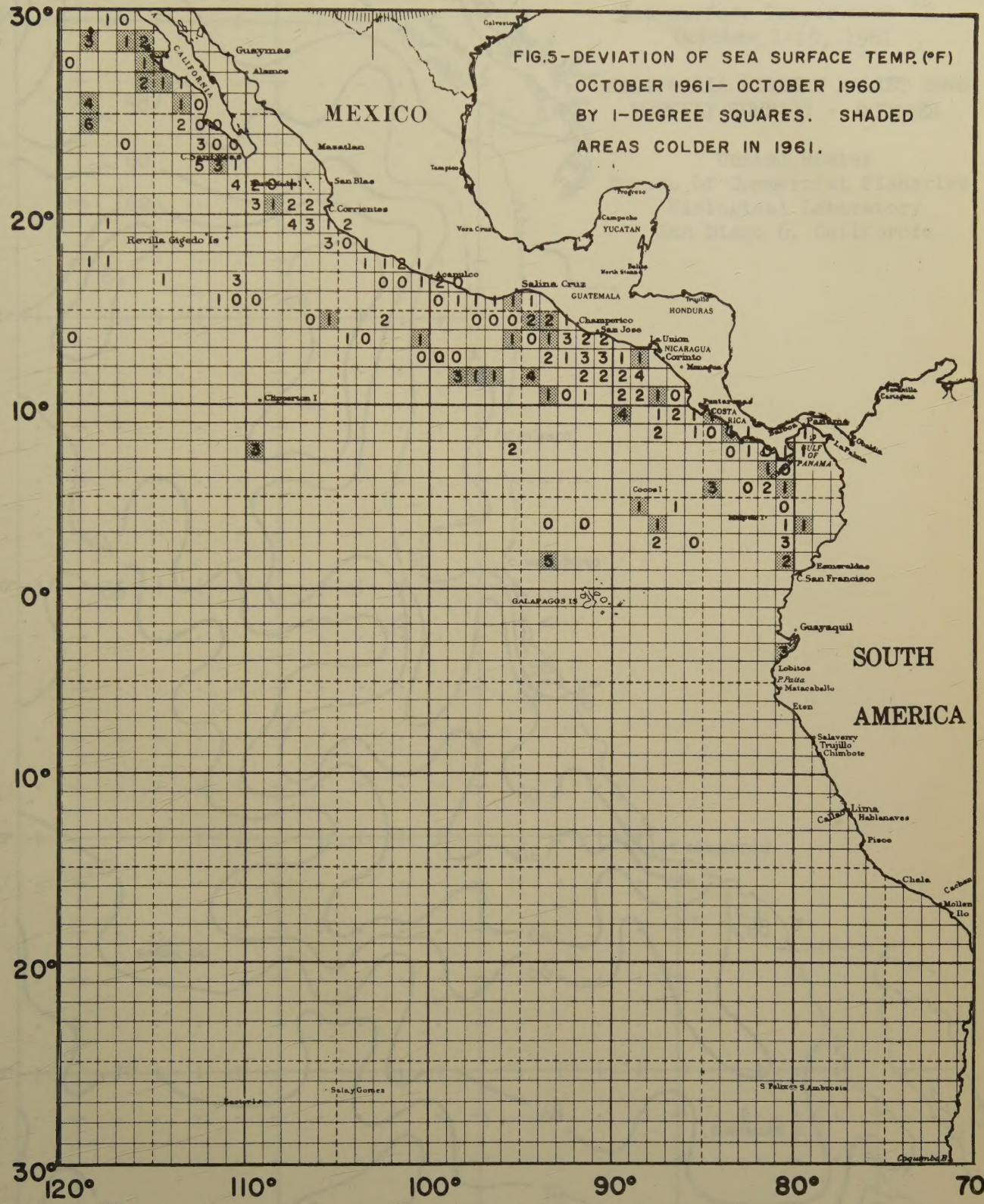
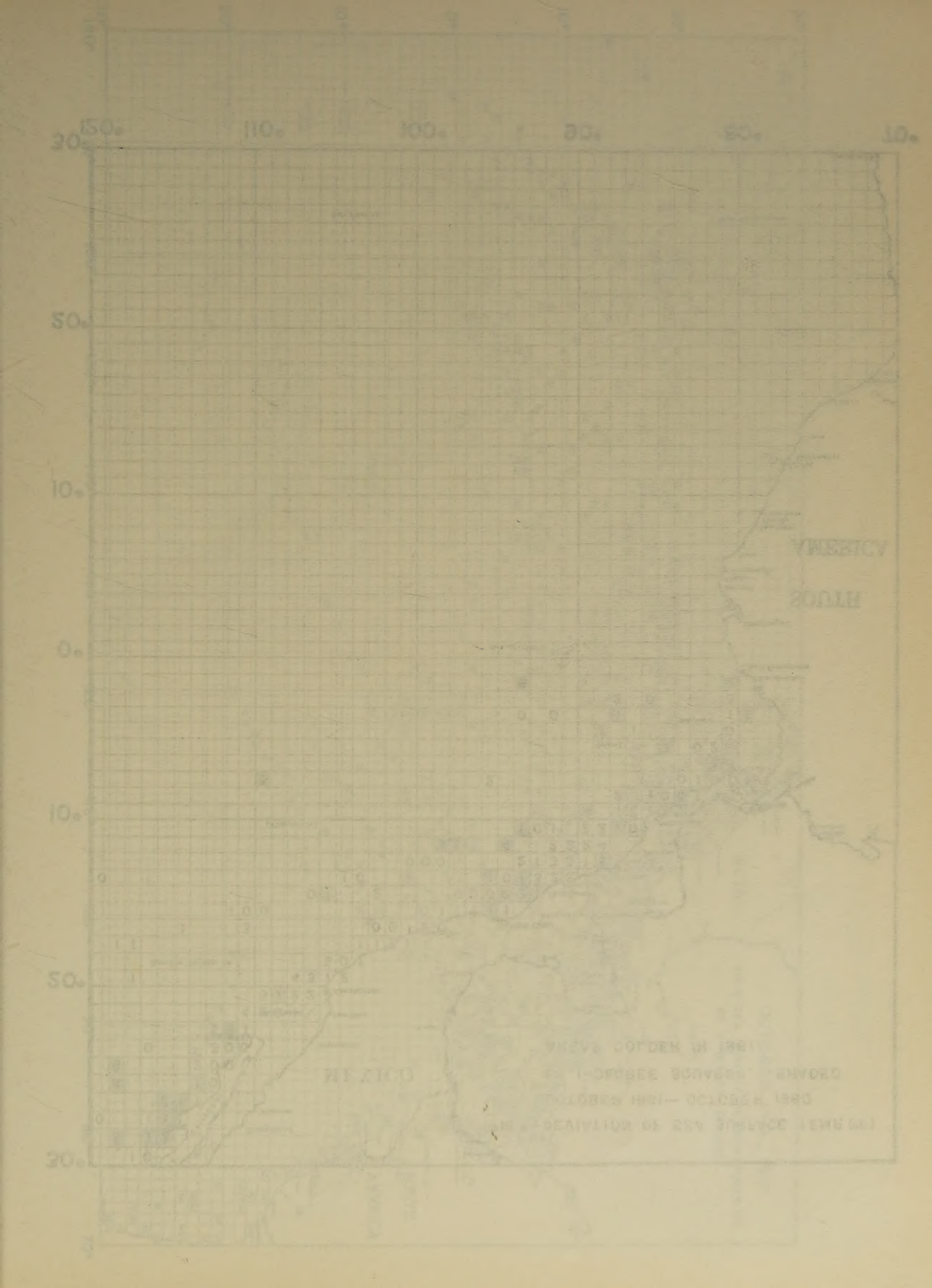
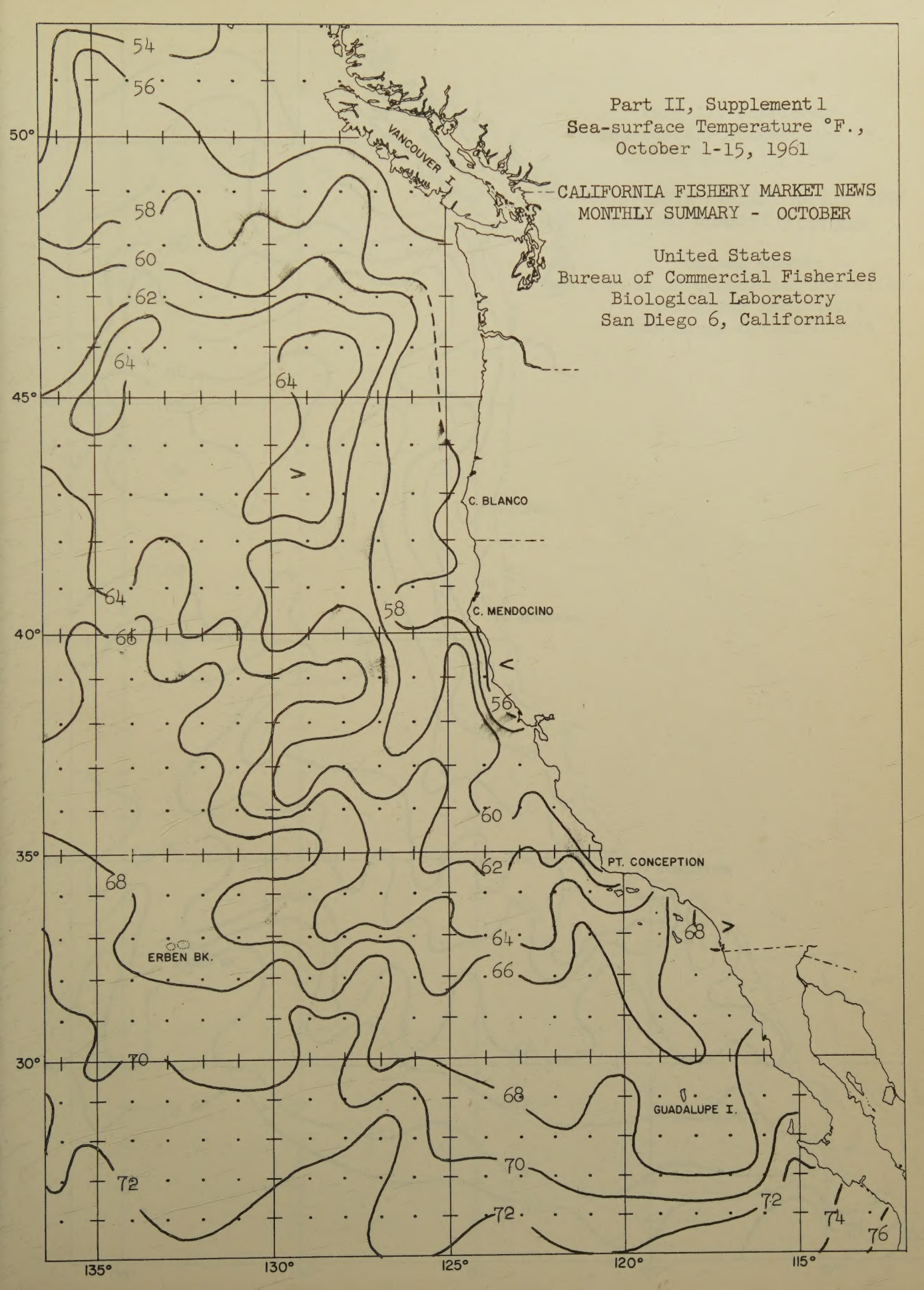
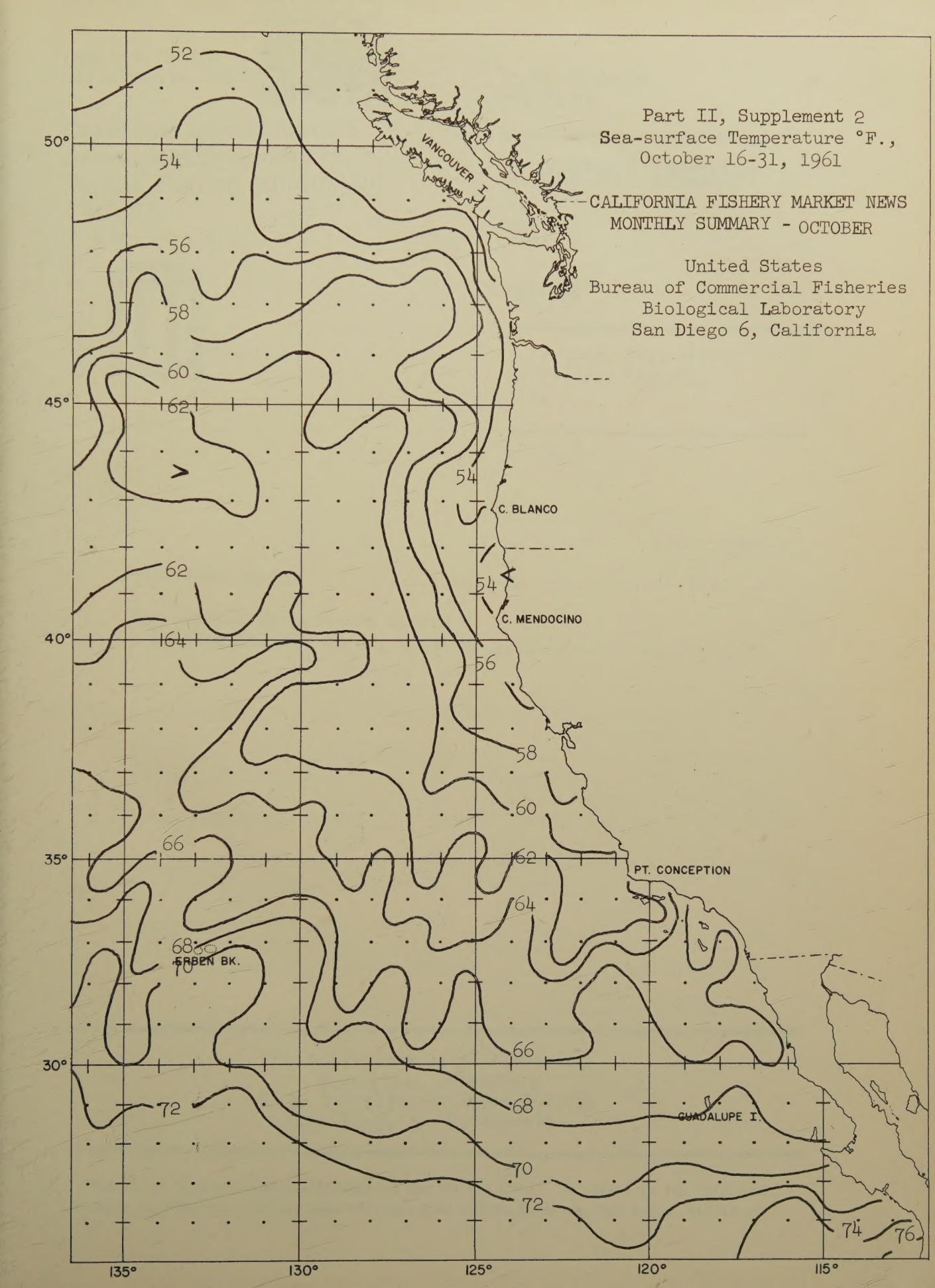


FIG.5-DEVIATION OF SEA SURFACE TEMP. (°F)
OCTOBER 1961— OCTOBER 1960
BY 1-DEGREE SQUARES. SHADED
AREAS COLDER IN 1961.
MEXICO
SOUTH
AMERICA
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
YUCATAN
GALAPAGOS IS
Guaymas
Alamos
Masatlan
San Blas
C. Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Chippertun I
Cocos I
Esmeraldas
C. San Francisco
Guayaquil
Lobitos
P. Pitta
Matacaballo
Eten
Salaverry
Trujillo
Chimbote
Callao
Lima
Hablenaves
Pisco
Chala
Mollendo
Salas y Gomez
S. Felix
S. Ambrosio
Panama
Gulf of Panama
30°
20°
10°
0°
10°
20°
30°
120°
110°
100°
90°
80°
70°




Part II, Supplement 1
Sea-surface Temperature °F.,
October 1-15, 1961
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - OCTOBER
United States
Bureau of Commercial Fisheries
Biological Laboratory
San Diego 6, California
VANCOUVER I.
C. BLANCO
C. MENDOCINO
PT. CONCEPTION
ERBEN BK.
GUADALUPE I.
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
54
56
58
60
62
64
66
68
70
72
74
76


Part II, Supplement 2
Sea-surface Temperature °F.,
October 16-31, 1961
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - OCTOBER
United States
Bureau of Commercial Fisheries
Biological Laboratory
San Diego 6, California
VANCOUVER I.
C. BLANCO
C. MENDOCINO
PT. CONCEPTION
GUADALUPE I.
ERBEN BK.
52
54
56
58
60
62
64
66
68
70
72
74
76
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°